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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,927

02/20/2004

Ronald A. Fleming

Kucera-5001

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EXAMINER

ANDERSON, JAMES D

ART UNIT

PAPER NUMBER

1614

MAIL DATE

DELIVERY MODE

06/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/783,927

Applicant(s)

FLEMING ET AL.

Examiner

James D. Anderson

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-65 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**CLAIMS 1-65 ARE PRESENTED FOR EXAMINATION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-13 and 64-65, drawn to a method of treating a host infected with a togavirus, a coronavirus or a herpes virus comprising administering a compound of Formula I, classified in class 514, subclass 129. Additional Election of Species Requirement outlined below.
- II. Claims 14-26, drawn to a method of treating a host infected with a togavirus, a coronavirus or a herpes virus comprising administering a compound of Formula II, classified in class 514, subclass 127. Additional Election of Species Requirement outlined below.
- III. Claims 27-38, drawn to a method of treating a host infected with a togavirus, a coronavirus or a herpes virus comprising administering a compound of Formula III, classified in class 514, subclass 127. Additional Election of Species Requirement outlined below.
- IV. Claims 39-52, drawn to a method of treating a host infected with a togavirus, a coronavirus or a herpes virus comprising administering a compound of Formula IV, classified in class 514, subclass 129. Additional Election of Species Requirement outlined below.
- V. Claims 53-63, drawn to a method of treating a host infected with a togavirus, a coronavirus or a herpes virus comprising administering a compound of Formula

AA-1, classified in class 514, subclass 129. Additional Election of Species

Requirement outlined below.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-V are directed to related methods of treating hosts infected with a togavirus, a coronavirus or a herpes virus. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, *i.e.*, are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed encompass related methods of treating a togavirus, a coronavirus or a herpes virus infection comprising administering structurally distinct compounds. For example, the compounds of Formula I as recited in Group I encompass a genus of compounds that is distinct from those recited in Groups II-V. As such, the search required for Group I would not be the same as that required for any of Groups II-V. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

These inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required. Because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Art Unit: 1614

*Election of Species Requirement*

Claims 1, 14, 27, 39 and 53 are generic to the following disclosed patentably distinct species: A) the multitude of structurally diverse compounds defined by Formulas I-IV and AA-1 and B) the distinct species of viruses recited in the claims. The species are independent or distinct because the search required for one compounds in the genus will not result in the identification of other species within the same genus. For example, in compounds of Formula I,  $R_1$  and  $R_2$  can be substituted with any  $C_1$ - $C_{22}$  alkyl, alkenyl or alkynyl. Compounds of Formula II include compounds wherein  $X_1$  is S, O, NH or  $NHC(O)$ . Clearly, a search for compounds wherein  $X_1$  is S will not identify compounds wherein  $X_1$  is NH. Similarly, in compounds of Formula III, Y is defined as S, O, NH,  $N(CH_3)$ ,  $NHC(O)$  or  $N(CH_3)C(O)$ . A search for compounds wherein Y is O will not result in identification of compounds wherein Y is  $NHC(O)$ . Compounds of Formula IV have similarly distinct substituents. With respect to the recited viruses, a search for methods of treating herpes virus would not be the same as a search for methods of treating a coronavirus. Applicants are required under 35 U.S.C. § 121 to elect a single disclosed species, even though this requirement is traversed. To be fully responsive to this Election of Species requirement, Applicants are required to identify a single species from the compounds of the elected invention and a single virus type for prosecution. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Art Unit: 1614

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

### ***Joint Inventors***

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR § 1.48(b) and by the fee required under 37 CFR § 1.17(i).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Anderson whose telephone number is 571-272-9038. The examiner can normally be reached on MON-FRI 9:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

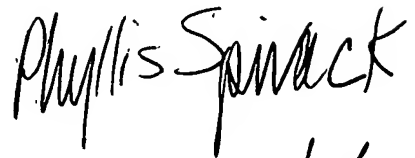
Art Unit: 1614

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James D. Anderson  
Patent Examiner  
AU 1614

June 18, 2007



PHYLLIS SPIVACK  
PRIMARY EXAMINER

6/18/07